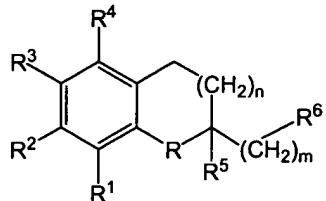


It is claimed:

1. A method of reducing the level of C-reactive protein (CRP) in an individual subject to a CRP associated inflammatory condition, comprising administering to the individual an effective amount of a composition comprising a compound of Formula I:



Formula I

wherein:

R is O, S, SO, SO₂, a secondary or tertiary amine, a phosphate, a phosphoester, or a substituted or unsubstituted methylene group;

R¹ and R² independently are H, OH, alkyl, aryl, alkenyl, alkynyl, ether, ester, amine, amide, halogen, or sulfonyl, or jointly complete a 5- or 6-membered aliphatic or aromatic ring;

R³ and R⁴ independently are H, OH, alkyl, aryl, alkenyl, alkynyl, ether, ester, amine, amide, nitro, halogen, or sulfonyl, or jointly complete a 5- or 6-membered aliphatic, aromatic or heterocyclic ring;

R⁵ is H, OH, alkyl, aryl, alkenyl, alkynyl, ester, or amine;

R⁶ is COOH, COOR⁷, CONH₂, CONHR⁷, CONR⁷R⁸, NH₂, NHR⁷, NR⁷R⁸, OH, or OR⁹;

R⁷ and R⁸ independently are alkyl, aryl, aralkyl, alkenyl, or alkynyl;

R⁹ is alkyl, aralkyl, alkenyl, alkynyl, or a glucoside;

n is 0 to 3; and

m is 0 to 5;

or individual isomer, racemic or non racemic mixture of isomers, of pharmaceutically acceptable salt or solvate thereof.

2. The method of claim 1, wherein the compound is selected from the group:

- 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid;
- 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid (adamantan-2-ylmethyl)-amide;
- 2-Hydroxymethyl-6-(6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ylmethoxy)-tetrahydro-pyran-3,4,5-triol;
- 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid methyl ester;
- 3-(6-Hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester;
- 3-(6-Hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid;
- 3-[8-(2-Methoxycarbonyl-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid methyl ester;
- 3-[8-(2-Carboxy-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid;

- 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid;
- 3-(6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-yl)-propionic acid;
- 3-(2,5,7,8-Tetramethyl-chroman-2-yl)-propionic acid;
- 3-(6-Hydroxy-2,7,8-trimethyl-5-nitro-chroman-2-yl)-propionic acid;
- 3-(6-Hydroxy-2-methyl-3,4-dihydro-2H-benzo[h]chromen-2-yl)-propionic acid;
- 3-(5-Bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester;
- 3-(5-Bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid;
- 3-(7,8-Dihydroxy-2-methyl-chroman-2-yl)-propionic acid; and
- 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid.

3. The method of claim 1, wherein the compound is selected from the group:

- 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid (adamantan-2-ylmethyl)-amide;
- 2-Hydroxymethyl-6-(6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ylmethoxy)-tetrahydro-pyran-3,4,5-triol;
- 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid methyl ester;
- 3-[8-(2-Methoxycarbonyl-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid methyl ester;
- 3-[8-(2-Carboxy-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid;
- 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid;
- 3-(2,5,7,8-Tetramethyl-chroman-2-yl)-propionic acid;
- 3-(6-Hydroxy-2,7,8-trimethyl-5-nitro-chroman-2-yl)-propionic acid;
- 3-(6-Hydroxy-2-methyl-3,4-dihydro-2H-benzo[h]chromen-2-yl)-propionic acid;
- 3-(5-Bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester;
- 3-(5-Bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid; and
- 3-(7,8-Dihydroxy-2-methyl-chroman-2-yl)-propionic acid.

4. The method of claim 1, wherein the compound is selected from 3-(6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid and 3-(6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester.

5. The method of claim 1, wherein the compound is selected from 3-(5-bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester and 3-(5-bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid.

6. A method of reducing the level of an inflammatory marker in an individual subject to end-stage renal disease comprising administering to the individual a composition comprising a compound of claim 1 in an effective amount.

7. The method of claim 6, wherein said inflammatory marker is C-reactive protein (CRP).
8. The method of claim 6, wherein said composition comprises a compound selected from the group:
 - 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid;
 - 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid (adamantan-2-ylmethyl)-amide;
 - 2-Hydroxymethyl-6-(6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ylmethoxy)-tetrahydro-pyran-3,4,5-triol;
 - 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid methyl ester;
 - 3-(6-Hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester;
 - 3-(6-Hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid;
 - 3-[8-(2-Methoxycarbonyl-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid methyl ester;
 - 3-[8-(2-Carboxy-ethyl)-3,5,6,8-tetramethyl-1,2,3,8,9,10-hexahydro-pyrano[3,2-f]chromen-3-yl]-propionic acid;
 - 3-(6-Hydroxy-2-methyl-chroman-2-yl)-propionic acid;
 - 3-(6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-yl)-propionic acid;
 - 3-(2,5,7,8-Tetramethyl-chroman-2-yl)-propionic acid;
 - 3-(6-Hydroxy-2,7,8-trimethyl-5-nitro-chroman-2-yl)-propionic acid;
 - 3-(6-Hydroxy-2-methyl-3,4-dihydro-2H-benzo[h]chromen-2-yl)-propionic acid;
 - 3-(5-Bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester;
 - 3-(7,8-Dihydroxy-2-methyl-chroman-2-yl)-propionic acid; and
 - 6-Hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid.
9. The method of Claim 6, wherein the compound is selected from 3-(6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid and 3-(6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester.
10. The method of Claim 6, wherein the compound is selected from 3-(5-bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester and 3-(5-bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid.
11. A method for ameliorating a symptom of an inflammatory condition in an individual subject to an inflammatory condition comprising administering to the individual a composition comprising a compound of Claim 1, in an amount effective to reduce the level of an inflammatory marker associated with said inflammatory condition.
12. The method of claim 11, wherein said inflammatory marker is C-reactive protein (CRP).

13. The method of claim 11, wherein said inflammatory condition is selected from the group consisting of cardiovascular inflammatory condition, respiratory inflammatory condition, sepsis, diabetes, muscle fatigue, systemic lupus erythematosus (SLE), end stage renal disease (ESRD), premenstrual syndrome (PMS), and periodontal disease.
14. The method of claim 11, comprising administering to the individual a composition comprising 3-(6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester in an amount effective to reduce the level of an inflammatory marker associated with said inflammatory condition.
15. The method of claim 14, wherein said inflammatory marker is C-reactive protein (CRP).
16. The method of claim 14 wherein said inflammatory condition is selected from the group consisting of cardiovascular inflammatory condition, respiratory inflammatory condition, sepsis, diabetes, muscle fatigue, SLE, renal inflammation including ESRD, premenstrual syndrome (PMS), and periodontal disease.
17. The method of claim 11, comprising administering to the individual a composition comprising 3-(5-bromo-6-hydroxy-2,7,8-trimethyl-chroman-2-yl)-propionic acid methyl ester in an amount effective to reduce the level of an inflammatory marker associated with said inflammatory condition.
18. The method of claim 17, wherein said inflammatory marker is C-reactive protein (CRP) or IL-6.
19. The method of claim 17, wherein said inflammatory condition is selected from the group consisting of cardiovascular inflammatory condition, respiratory inflammatory condition, sepsis, diabetes, muscle fatigue, SLE, renal inflammation including ESRD, premenstrual syndrome (PMS), and periodontal disease.
20. The method of claim 1, wherein said composition further comprises a pharmaceutically acceptable carrier.
21. The method of claim 6, wherein said composition further comprises a pharmaceutically acceptable carrier.
22. The method of claim 11, wherein said composition further comprises a pharmaceutically acceptable carrier.